

RESPONSE

Applicants affirm the election of Group I, claims 1-32 and 34, directed to compounds and compositions. Upon notice that the Group I claims are allowable, applicants request rejoinder of withdrawn claim 33, which is directed to a process for making the compounds of formula (I).

Applicants have amended the specification to correct an obvious error and insure clarity and consistency in the disclosure. No new matter has been added. Paragraph 51 of the specification addresses preferred, chiral compounds of formula I. The asymmetric carbon atom is identified as the carbon upon which R⁶ is a substituent (at the 4-position of the ring system) and which can be in the R or S configuration. In accordance with the definition provided in the previous paragraph, number 50, and as would be understood by one of ordinary skill in the art, the term asymmetric carbon atom means a carbon with four different substituents. Accordingly, it is well understood that the inclusion of hydrogen as an option for R⁶ is an error because R⁶ as hydrogen would result in the 4-position carbon atom having two hydrogens as substituents. Thus, when R⁶ is hydrogen, the 4-position carbon would not be an asymmetric carbon. In view of this obvious error, applicants have amended paragraph 51 to remove the option hydrogen for R⁶ in connection with the chiral compounds of the present invention.

Reconsideration and withdrawal of the objections and rejections are respectfully requested.

In response to the Examiner's objections to the Abstract, applicants provide a substitute Abstract which denotes the structure of formula (I). To correct an informality in the specification, applicants have amended paragraph 22 as requested by the Examiner.

The Examiner has rejected claims 1-14, 16, 18, 20, 22, 24, 26, 28, 30 and 34 under 35 USC § 112, second paragraph, as indefinite. As suggested by the Examiner, recitation of "solvents" in claims 1, 13, 14, 16, 18, 20, 22, 24, 26, 28 and 30 has been

amended to -- hydrates--. Also, claims 16, 18, 20, 22, 24, 26, 28 and 30 have been amended to revise “pharmaceutically acceptably” to --pharmaceutically acceptable--.

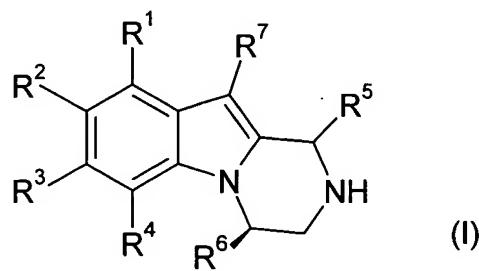
The Examiner also contends that recitation of a pharmaceutically acceptable ester is of indeterminate scope. One skilled in the art would understand what is meant by the term pharmaceutically acceptable ester in the claims. Moreover, paragraph 45 of the specification provides guidance in this regard.

It is believed that applicants have overcome the rejection under section 112, second paragraph.

Claims 1-14, 16, 18, 20, 22, 24, 26, 28, 30 and 34 are rejected under 35 USC § 112, first paragraph, as not enabled. The amendments revising “solvates” to -- hydrates -- discussed above obviates the rejection.

The Examiner argues that the specification does not enable the scope of the heterocycles as R¹ – R⁴. Applicants note that the Examiner has not provided evidence to demonstrate that the specification is not enabling for R¹ – R⁴ heterocycles. As the Examiner has not provided any reason to doubt the objective truth of the specification, applicants submit that the specification meets the requirements of 35 USC § 112, first paragraph.

Claims 1, 8-10 and 34 have been rejected under 35 USC § 102 (b) as anticipated by Bos (EP '863). The claims have been amended to direct the subject matter to a disclosed preferred embodiment, chiral compounds of claim 1. As amended, claims 1, 13 and 33 no longer recite that R⁶ can be hydrogen. (R⁶ is the substituent on the 4-position carbon atom of the formula (I) ring system shown below.)



Support for the amendments reciting chiral compounds and removing the option hydrogen from substituent R⁶ is supported by the specification in paragraphs 51 and 50. See also the discussion above concerning the amendment to paragraph 51 of the specification. As the compounds of Bos do not have an asymmetric carbon at the 4-position, the present claim amendments obviate the rejection.

Claims 1 and 8-10 have been rejected under 35 USC § 102(b) as anticipated by Adams (WO'753). Applicants submit that the compounds of Adams differ from the claimed compounds. The compounds of Adams noted by the Examiner contain a saturated heterocyclic ring as the center ring of the three-membered fused ring structure. In the claimed compounds, the center ring requires a double bond at a particular location, as shown in formula (I) above.

In addition, Adams lacks any teaching of a chiral carbon at the 4-position. As amended, the claimed subject matter has a chiral carbon at position-4, i.e., R⁶ does not encompass hydrogen. As Adams does not contain every element of the claimed invention, the rejection has been overcome.

Claims 2-7 and 11-32 have been rejected under 35 USC § 103(a) as obvious over Bos in view of Adams. Applicants note the amendments to claims 1, 13 and 33 as discussed above. As amended, the claims are directed to a chiral compound wherein R⁶ is alkyl, cycloalkyl, hydroxyalkyl or alkoxyalkyl. Neither Bos nor Adams teach or suggest a chiral carbon at the 4-position. Bos teaches no substitution at all on positions 1, 2 and 4, i.e., no asymmetric carbon atoms are present in the pyrazine ring of the ring system. Adams reports that position 1 or 3 can be substituted with hydrogen or lower alkyl (Adams substituents R¹ and R³, respectively), yet Adams conspicuously lacks this option at the 4-position. Moreover, Adams does not point to asymmetric carbons, even at position 1 or 3. The embodiment singularly mentioned by Adams for R¹ and R³ is the choice hydrogen. See page 8, lines 1-5 and 9-15. The combination of Bos and Adams fails to teach or suggest the presently claimed invention, directed to chiral compounds of formula (I), wherein position 4 is an asymmetric carbon. It is submitted that the rejection under section 103 has been overcome.

Serial No. 10/092,751
Filed: March 7, 2002

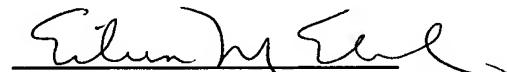
Claims 1, 13 and 34 stand rejected under 35 USC § 102(b) by Grinev. As noted by the Examiner, Grinev discloses compounds for use as psychotropics, whereas the claimed compounds are useful as anti-obesity agents. Furthermore, as in the above references, Grinev formula IV compounds fail to teach an asymmetric carbon at position 4 (utilizing the numbering system identified herein). The claim amendments obviate the rejection.

For completeness, applicants bring the Examiner's attention to pending application Serial No. 10/396,242, filed March 25, 2003.

Issuance of a Notice of Allowance is respectfully requested.

A Petition for Extension of Time – 3 months – is enclosed. If the required fee is missing or deficient, please charge out deposit account no. 08-2525.

Respectfully submitted,


Attorney for Applicant(s)
(Reg. No. 37,316)
340 Kingsland Street
Nutley, NJ 07110
Telephone (973) 235-4391
Telefax: (973) 235-2363

135566